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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,167	10/31/2003	Christopher A. Chaulk	EMC03-21(03115)	5467
7590 Barry W. Chapin, Esq. CHAPIN & HUANG, L.L.C. 1700 West Park Drive Westborough, MA 01581		EXAMINER NGUYEN, CHAU T		
		ART UNIT	PAPER NUMBER 2176	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/701,167	CHAULK ET AL.	
	Examiner	Art Unit	
	Chau Nguyen	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 November 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,4-10,12-17,20-24,26-29,31,32 and 34-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4-10,12-17,20-24,26-29,31,32 and 34-37 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment filed 11/13/2006.
2. Claims 1, 4-10, 12-17, 20-24, 26-29, 31-32, 34, and 35-37 are pending in this case. Claims 1, 17, 31, 32, 34, 35, and 36 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1, 4-8, 15-16, 32, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed May 25, 2001) (hereinafter 'Woodmansee') in view of Myhrvold et al. (Patent No.: 5,867,166; Date of Patent: Feb. 2, 1999) (hereinafter 'Myhrvold').**

In regards to independent claim 1, Woodmansee discloses a *computer program product having computer program code embodying an encoded set of processor based instructions on a computer readable medium for performing, via a processor responsive to the instructions, a method of organizing and generating report data renderable on a graphical user output device indicative of a plurality of manageable entities in a managed information network comprising* (0017; Woodmansee discloses a computer program product comprising a computer useable medium having

computer program logic stored thereon for enabling a processor in a computer system to organize data.):

determining an output criteria applicable to a set of data to compute an ordered output display set adapted for inclusion in a report, the determined output criteria including (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets);

a selection criteria indicative of output records for inclusion in the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database);

an arrangement criteria indicative of display formatting applicable to the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. The resulting output of a database query might be transferred to another application (i.e. spreadsheet application) for examination, sorting and calculation if necessary. The results can further be transferred to an application such as presentation software for report generation and charting);

the selection criteria including a filtering criteria, applying further comprising filtering according to the filtering criteria, the filtering operable to designate a subset of entries for inclusion in the first pass and the filtering criteria operable on at least one of the fields for comparison and selective inclusion in the designated subset (0003;

Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. 0014; Woodmansee discloses extracting data from the database system using filters (*filtering criteria*), and processing the extracted data to produce sorted datasets (*subset*). At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset (*subset*), the data would undergo a comparison process to determine the ordering of the data);

omitting from memory, in the second pass, entries in the parsed plurality of entries outside the candidate set (At the time of the invention it would have been obvious to a person of ordinary skill in the art that the data outside the determined criteria would not be included in the acceptable dataset which is to be stored);

processing, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries in a tangible medium of expression on the graphical user output device (0014; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets);

Woodmansee does not expressly disclose *parsing, in a first pass, a plurality of entries in the set of data;*

applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries;

parsing, in a second pass, the computed subset of candidate entries;

However, Myhrvold teaches *parsing, in a first pass, a plurality of entries in the set of data* (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a subset of data during a first pass, which is rendered data for a second pass.).

parsing, in a second pass, the computed subset of candidate entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee with Myhrvold for the benefit eliminating potential administrative problems for an analyst with regards to manually manipulating large datasets from one application to another (0005).

In regards to dependent claims 4, Woodmansee discloses *the method of claim 1, further comprising retaining in a memory, in the first pass, only the selection and arrangement criteria fields* (0014; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets. Woodmansee further disclose storing the analysis object (*selection and arrangement criteria fields*) in an analysis database in the network server.).

In regards to dependent claims 5, Woodmansee discloses *the method of claim 1 wherein the selection criteria corresponds to displayable entries operable for simultaneous display on an output device* (0038; Woodmansee discloses the raw data (*displayable entries*) is filtered and displayed on each client computer. Each client computer may further be loaded with applications such as Excel, MINTLAB, PowerPoint and PLADB. Thus, these applications allow the displayable entries to be displayed simultaneously.).

In regards to dependent claims 6, Woodmansee discloses *the method of claim 1 wherein the arrangement criteria is indicative of ordering logic applicable to a subset of fields each of the entries based on a comparison of the fields in the entries* (0014; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets. At the time of

the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data.).

In regards to dependent claims 7, Woodmansee discloses *the method of claim 6 wherein the ordering logic processes at least one of the fields according to ascending or descending values* (0014; 0038; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data.

Woodmansee further discloses the raw data (dataset) is filtered and displayed on each client computer. Each client computer may further be loaded with applications such as Excel. It has been established and is well known in the art that applications such as Excel, can sort a dataset in either alphabetical or numerical order, depending on the data type of the dataset, thus sorting the dataset according to *ascending or descending values*.).

In regards to dependent claims 8, Woodmansee discloses *the method of claim 1 wherein the determined criteria is operable on key fields of the entries, the key fields having scalar values operable for comparison* (0014; 0038; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing

the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data. Woodmansee further discloses the raw data (dataset) is filtered and displayed on each client computer. Each client computer may further be loaded with applications such as Excel. It has been established and is well known in the art that applications such as Excel, can sort a dataset in either alphabetical or numerical order (*scalar values*), depending on the data type of the dataset, thus sorting the dataset according to *ascending or descending values*.).

In regards to dependent claim 15, Woodmansee discloses *the method of claim 1 wherein the first pass further comprises filtering entries for omission from the candidate set and comparing key fields in entries for inclusion in the candidate set* (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters, and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data.).

In regards to dependent claim 16, Woodmansee discloses *the method of claim 1 wherein the second pass further comprises matching entries for inclusion in the*

candidate set, sorting entries in the candidate set, and formatting entries in the candidate set for display on the output device (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Using the broadest interpretation, the Examiner believes these criterias to include, but not be limited to matching entries for inclusion in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set for display on the output device. Woodmansee further discloses extracting data from the database system using filters (output criteria), and processing the extracted data to produce sorted datasets.)

Woodmansee does not expressly disclose a second pass.

However, Myhrvold teaches a second pass (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee with Myhrvold for the benefit eliminating potential administrative problems for an analyst with regards to manually manipulating large datasets from one application to another (0005).

In regards to independent claim 32, Woodmansee discloses a computer program product having a computer readable medium operable to store computer

program logic embodied in encoded set of processor based instruction encoded thereon for performing, via a processor responsive to the instructions, organizing and generating report data renderable on a graphical user output device indicative of a plurality of manageable entities in a managed information network comprising (0017; Woodmansee discloses a computer program product comprising a computer useable medium having computer program logic stored thereon for enabling a processor in a computer system to organize data.):

computer program code for determining an output criteria applicable to a set of data to compute an ordered output display set adapted for inclusion in a report, the determined output criteria including:

a selection criteria indicative of output records for inclusion in the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database.), the selection criteria including a filtering criteria, applying further comprising filtering according to the filtering criteria, the filtering operable to designate a subset of entries for inclusion in the first pass and the filtering criteria operable on at least one of the fields for comparison and selective inclusion in the designated subset (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. 0014; Woodmansee discloses extracting data from the database system using filters (filtering criteria), and processing the extracted data to produce sorted datasets (subset). At the time of the invention it would have been obvious to a person of ordinary skill in the art

that in order to produce a sorted dataset (*subset*), the data would undergo a comparison process to determine the ordering of the data);

an arrangement criteria indicative of display formatting applicable to the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. The resulting output of a database query might be transferred to another application (i.e. spreadsheet application) for examination, sorting and calculation if necessary. The results can further be transferred to an application such as presentation software for report generation and charting.).

computer program code for omitting from memory, in the second pass, entries in the parsed plurality of entries outside the candidate set (At the time of the invention it would have been obvious to a person of ordinary skill in the art that the data outside the determined criteria would not be included in the acceptable dataset which is to be stored.).

computer program code for processing, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries in a tangible medium of expression on the graphical user output device (0014; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets.).

Woodmansee does not expressly disclose *computer program code for parsing, in a first pass, a plurality of entries in the setof data;*

computer program code for applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries;

computer program code for parsing, in a second pass, the computed subset of candidate entries;

However, Myhrvold teaches *computer program code for parsing, in a first pass, a plurality of entries in the set of data* (col. 10, lines 24-28; col. 11, lines 1-12; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

computer program code for applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries col. 10, lines 24-28; col. 11, lines 1-12; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

computer program code for parsing, in a second pass, the computed subset of candidate entries entries (col. 10, lines 24-28; col. 11, lines 1-12; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of

a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee with Myhrvold for the benefit eliminating potential administrative problems for an analyst with regards to manually manipulating large datasets from one application to another (0005).

In regards to independent claim 34, Woodmansee discloses a *data management device for organizing and generating report data indicative of a plurality of manageable entities renderable on a graphical user output device in a storage area network (SAN) comprising:*

means for determining an output criteria applicable to a set of data to compute an ordered output display set adapted for inclusion in a report the determined output criteria including (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets.):

a selection criteria indicative of output records for inclusion in the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database.), *the selection criteria including a filtering criteria, applying further comprising filtering according to the filtering criteria, the filtering operable to designate a subset of entries for inclusion in the first pass and the*

filtering criteria operable on at least one of the fields for comparison and selective inclusion in the designated subset (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. 0014; Woodmansee discloses extracting data from the database system using filters (*filtering criteria*), and processing the extracted data to produce sorted datasets (*subset*). At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset (*subset*), the data would undergo a comparison process to determine the ordering of the data);

an arrangement criteria indicative of display formatting applicable to the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. The resulting output of a database query might be transferred to another application (i.e. spreadsheet application) for examination, sorting and calculation if necessary. The results can further be transferred to an application such as presentation software for report generation and charting.).

computer program code for processing, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries in a tangible medium of expression on the graphical user output device (0014; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets.).

Woodmansee does not expressly disclose *means for parsing, in a first pass, a plurality of entries in the set of data;*

means for applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries;

means for parsing, in a second pass, the computed subset of candidate entries;

means for omitting from memory, in the second pass, entries in the parsed plurality of entries outside the candidate set;

However, Myhrvold teaches *means for parsing, in a first pass, a plurality of entries in the set of data;*

means for applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

means for parsing, in a second pass, the computed subset of candidate entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

means for omitting from memory, in the second pass, entries in the parsed plurality of entries outside the candidate set (At the time of the invention it would have been obvious to a person of ordinary skill in the art that the data outside the determined criteria would not be included in the acceptable dataset which is to be stored.).

means for processing, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee with Myhrvold for the benefit eliminating potential administrative problems for an analyst with regards to manually manipulating large datasets from one application to another (0005).

In regards to independent claim 35, Woodmansee discloses a *method for organizing and generating report data indicative of a plurality of manageable entities renderable on a graphical user output device in a managed information network comprising:*

determining an output criteria applicable to a set of data to compute an

ordered output display set adapted for inclusion in a report *the determined output criteria including* (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters (output criteria), and processing the extracted data to produce sorted datasets.):

a selection criteria indicative of output records for inclusion in the candidate entries, the selection criteria corresponding to displayable entries operable for simultaneous display on an output device (0003; 0038; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses the raw data (*displayable entries*) is filtered and displayed on each client computer. Each client computer may further be loaded with applications such as Excel, MINTLAB, PowerPoint and PLADB. Thus, these applications allow the displayable entries to be displayed simultaneously.).

an arrangement criteria indicative of display formatting applicable to the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. The resulting output of a database query might be transferred to another application (i.e. spreadsheet application) for examination, sorting and calculation if necessary. The results can further be transferred to an application such as presentation software for report generation and charting.).

retaining in a memory, in the first pass, only the selection and arrangement criteria fields (0003; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. The resulting output of a database query might be transferred to another application (i.e. spreadsheet application) for examination, sorting and calculation if necessary. The results can further be transferred to an application such as presentation software for report generation and charting. At the time of the invention it would have been obvious to a person of ordinary skill in the art that the data outside the determined criteria would not be included in the acceptable dataset which is to be stored.).

Woodmansee does not expressly disclose parsing, in a first pass, a plurality of entries in the set of data;

applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries;

parsing, in a second pass, the computed subset of candidate entries, the parsed entries of the second pass requiring substantially less memory than the first pass such that the parsed entries of the second pass are stored simultaneously in memory;

omitting from memory, in the second pass, entries in the parsed plurality of entries outside the candidate set.

processing, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries.

However, Myhrvold teaches *parsing, in a first pass, a plurality of entries in the set of data;*

applying, during the first pass, the determined output criteria to a

portion of each parsed entry to compute a subset of candidate entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (subset of candidate entries) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

parsing, in a second pass, the computed subset of candidate entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (subset of candidate entries) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

omitting from memory, in the second pass, entries in the parsed plurality of entries outside the candidate set (At the time of the invention it would have been obvious to a person of ordinary skill in the art that the data outside the determined criteria would not be included in the acceptable dataset which is to be stored.).

processing, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (subset of candidate entries) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

Myhrvold teaches wherein the parsed entries of the second pass require substantially less memory than the first pass such that the parsed entries of the second pass are stored simultaneously in memory (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters (output criteria), and processing the extracted data to produce sorted datasets).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee with Myhrvold for the benefit eliminating potential administrative problems for an analyst with regards to manually manipulating large datasets from one application to another (0005).

Claims 9-10, 17-29, are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed may 25, 2001) (hereinafter ‘Woodmansee’) in view of Myhrvold et al. (Patent No.: 5,867,166; Date of Patent: Feb. 2, 1999) (hereinafter ‘Myhrvold’) further in view of Jamshidi et al. (Patent. No.: 6,631,497 B1; Filed: Jul. 19, 1999) (hereinafter ‘Jamshidi’).

In regards to dependent claims 9, Woodmansee in view of Myhrvold does not expressly disclose the method of claim 1 wherein the set of data is arranged in a

predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns.

However, Jamshidi teaches *the set of data is arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns* (col. 2, lines 16-21; Jamshidi teaches binding data from a data source to one or more cells in a spreadsheet by importing a data object and defining a data source model for a data object.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Jamshidi for the benefit of providing a seamless two-way link between the spreadsheet and an external data source, so that the two appear to be fully integrated (col.2 lines 34-37).

In regards to dependent claims 10, Woodmansee in view of Myhrvold disclose the method of claim 1 wherein the predetermined data set format defines a syntax having a nested structure conversant with a parser operable to perform the first parse and the second parse (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

Woodmansee in view of Myhrvold does not expressly disclose *the parser further operable to extract entries and fields in each of the entries according to rows and columns.*

However, Jamshidi teaches *the set of data is arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns* (col. 2, lines 16-21; Jamshidi teaches binding data from a data source to one or more cells in a spreadsheet by importing a data object and defining a data source model for a data object.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Jamshidi for the benefit of providing a seamless two-way link between the spreadsheet and an external data source, so that the two appear to be fully integrated (col.2 lines 34-37).

In regards to independent claim 17, Woodmansee discloses a data management device for organizing and generating report data indicative of a plurality of manageable entities renderable on a graphical user output device in a storage area network (SAN) comprising:

an infrastructure monitor operable for receiving an output criteria applicable to a set of data to compute an ordered output display set adapted for inclusion in a report, the determined output criteria including (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system

using filters (output criteria), and processing the extracted data to produce sorted datasets.):

a selection criteria indicative of output records for inclusion in the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database.).

an arrangement criteria indicative of display formatting applicable to the candidate entries (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. The resulting output of a database query might be transferred to another application (i.e. spreadsheet application) for examination, sorting and calculation if necessary. The results can further be transferred to an application such as presentation software for report generation and charting.).

the selection criteria including a filtering criteria, applying further comprising filtering according to the filtering criteria, the filtering operable to designate a subset of entries for inclusion in the first pass and the filtering criteria operable on at least one of the fields for comparison and selective inclusion in the designated subset (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. 0014; Woodmansee discloses extracting data from the database system using filters (filtering criteria), and processing the extracted data to produce sorted datasets (subset). At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset

(subset), the data would undergo a comparison process to determine the ordering of the data);

Woodmansee does not expressly disclose a *parser in the infrastructure monitor for parsing, in a first pass, a plurality of entries in the set of data, the parser operable to omit from memory, in the second pass, entries in the parsed plurality of entries outside the candidate set;*

a first handler in the parser for applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries;

a second handler in the parser for parsing, in a second pass, the computed subset of candidate entries, the parser operable to process, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries.

However, Myhrvold teaches a *parser in the infrastructure monitor for parsing, in a first pass, a plurality of entries in the set of data, the parser operable to omit from memory, in the second pass, entries in the parsed plurality of entries outside the candidate set* (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. At the time of the invention it would have been obvious to a person of ordinary skill in the art that the data outside the determined criteria would not be included in the acceptable dataset which is to be stored.).

a first handler in the parser for applying, during the first pass, the determined

output criteria to a portion of each parsed entry to compute a subset of candidate entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

a second handler in the parser for parsing, in a second pass, the computed subset of candidate entries, the parser operable to process, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee with Myhrvold for the benefit eliminating potential administrative problems for an analyst with regards to manually manipulating large datasets from one application to another (0005).

Woodmansee in view of Myhrvold does not expressly disclose *the data management device of claim 17 wherein the set of data is arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns.*

However, Jamshidi teaches *the set of data is arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns* (col. 2, lines 16-21; Jamshidi teaches binding data from a data source to one or more cells in a spreadsheet by importing a data object and defining a data source model for a data object.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Jamshidi for the benefit of providing a seamless two-way link between the spreadsheet and an external data source, so that the two appear to be fully integrated (col.2 lines 34-37).

In regards to dependent claims 20, Woodmansee discloses *the data management device of claim 17 wherein the parser is operable to retain, in a memory, in the first pass, only the selection and arrangement criteria fields* (0014; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets. Woodmansee further disclose storing the analysis object (*selection and arrangement criteria fields*) in an analysys database in the network server.).

In regards to dependent claims 21, Woodmansee discloses *the data management device of claim 17 wherein the selection criteria corresponds to displayable entries operable for simultaneous display on an output device* (0038; Woodmansee discloses the raw data (*displayable entries*) is filtered and displayed on

each client computer. Each client computer may further be loaded with applications such as Excel, MINTLAB, PowerPoint and PLADB. Thus, these applications allow the displayable entries to be displayed simultaneously.).

In regards to dependent claims 22, Woodmansee discloses *the data management device of claim 17 wherein the arrangement criteria is indicative of ordering logic applicable to a subset of fields each of the entries based on a comparison of the fields in the entries* (0014; Woodmansee discloses extracting data from the database system using filters, and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data.).

In regards to dependent claims 23, Woodmansee discloses *the data management device of claim 22 wherein the ordering logic processes at least one of the fields according to ascending or descending values* (0014; 0038; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data. Woodmansee further discloses the raw data (dataset) is filtered and displayed on each client computer. Each client computer may further be loaded

with applications such as Excel. It has been established and is well known in the art that applications such as Excel, can sort a dataset in either alphabetical or numerical order, depending on the data type of the dataset, thus sorting the dataset according to *ascending or descending values.*).

In regards to dependent claims 24, Woodmansee discloses *the data management device of claim 17 wherein the determined criteria is operable on key fields of the entries, the key fields having scalar values operable for comparison* (0014; 0038; Woodmansee discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data. Woodmansee further discloses the raw data (dataset) is filtered and displayed on each client computer. Each client computer may further be loaded with applications such as Excel. It has been established and is well known in the art that applications such as Excel, can sort a dataset in either alphabetical or numerical order, depending on the data type of the dataset, thus sorting the dataset according to *ascending or descending values.*).

In regards to dependent claims 26, Woodmansee in view of Myhrvold discloses *the data management device of claim 25 wherein the predetermined data set format defines a syntax having a nested structure conversant with a parser operable to*

perform the first parse and the second parse, the parser further operable to extract entries and fields in each of the entries according to rows and columns (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

Woodmansee in view of Myhrvold does not expressly disclose the parser further operable to extract entries and fields in each of the entries according to rows and columns.

However, Jamshidi teaches the set of data is arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns (col. 2, lines 16-21; Jamshidi teaches binding data from a data source to one or more cells in a spreadsheet by importing a data object and defining a data source model for a data object.).

In regards to dependent claims 27, the data management device of claim 17 further comprising filtering according to a filtering criteria, the filtering operable to designate a subset of entries for inclusion in the first pass and the filtering criteria operable on at least one of the field for comparison and selective inclusion in the designated subset (0014; Woodmansee discloses extracting data from the database system using filters, and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the

art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data.).

5. **Claims 12-14 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed may 25, 2001) (hereinafter ‘Woodmansee’) in view of Myhrvold et al. (Patent No.: 5,867,166; Date of Patent: Feb. 2, 1999) (hereinafter ‘Myhrvold’), and further in view of Bates et al. (Patent No.: US 6,901,403 B1; Filing Date: Sep. 14, 2001) (hereinafter ‘Bates’).**

In regards to dependent claims 12, Woodmansee and Myhrvold do not expressly disclose *the method of claim 1 wherein parsing further comprises generating parsing events for initiating callback operations, the callback operable on the data set according to predetermined logic.*

However, Bates discloses *generating parsing events for initiating callback operations, the callback operable on the data set according to predetermined logic* (column 11, lines 54-66; Bates teaches a file system interface provide callbacks corresponding to system requests and communicate the requests to the data access manager).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee and Myhrvold with Bates for the benefit

of a simplified and intuitive means of accessing, presenting, manipulating, and modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claims 13, Woodmansee in view of Myhrvold does not expressly disclose *the method of claim 12 wherein the parsing event correspond to predetermined syntactical structure, and the callback operations are operable for applying the determined output criteria on the entries in the data set.*

However, Bates teaches *the method of claim 12 wherein the parsing event correspond to predetermined syntactical structure, and the callback operations are operable for applying the determined output criteria on the entries in the data set* (col. 11, lines 54 - col. 12, line 8; Bates teaches a file system interface provide callbacks corresponding to system requests and communicate the requests to the data access manager. Information in the messages may include an indication of a table in the relational database, and a certain data element (or criteria to determine the data elements) in the table.).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Bates for the benefit of a simplified and intuitive means of accessing, presenting, manipulating, and modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claims 14, Woodmansee in view of Myhrvold does not expressly disclose *the method of claim 13 wherein the callback operations further*

include building the candidate set, filtering the entries in the data set, matching entries in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set.

However, Bates teaches *the method of claim 13 wherein the callback operations further include building the candidate set, filtering the entries in the data set, matching entries in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set* (column 11, lines 54-66; Bates teaches a file system interface provide callbacks corresponding to system requests and communicate the requests to the data access manager, supply data to the operating system in a format conforming to the operating system, and perform other desired tasks). Using the broadest interpretation of “perform other desired tasks”, the examiner believes this to include, but not be limited to, *building the candidate set, filtering the entries in the data set, matching entries in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set*).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Bates for the benefit of a simplified and intuitive means of accessing, presenting, manipulating, and modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claim 36, Woodmansee in view of Myhrvold does not expressly disclose *the method of claim 35 wherein parsing further comprises generating parsing events for initiating callback operations, the callback operations operable on the*

data set according to predetermined logic, the parsing event corresponding to predetermined syntactical structures, and the callback operations are operable for applying the determined output criteria on the entries in the data set, wherein the callback operations further include building the candidate set, filtering the entries in the data set, matching entries in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set.

However, Bates teaches *the method of claim 35 wherein parsing further comprises generating parsing events for initiating callback operations, the callback operations operable on the data set according to predetermined logic, the parsing event corresponding to predetermined syntactical structures, and the callback operations are operable for applying the determined output criteria on the entries in the data set, wherein the callback operations further include building the candidate set, filtering the entries in the data set, matching entries in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set* (col. 11, lines 54 - col. 12, line 8; Bates teaches a file system interface provide callbacks corresponding to system requests and communicate the requests to the data access manager. Information in the messages may include an indication of a table in the relational database, and a certain data element (or criteria to determine the data elements) in the table. Bates further teaches the file system interface provides supply data to the operating system in a format conforming to the operating system, and performs other desired tasks. Using the broadest interpretation of "perform other desired tasks", the examiner believes this to include, but not be limited to, building the candidate set, filtering the entries in the data

set, matching entries in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set.).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Bates for the benefit of a simplified and intuitive means of accessing, presenting, manipulating, and modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claim 37, Woodmansee in view of Myhrvold does not expressly disclose *the method of claim 36 wherein the parsed entries in the first pass are excessively large for concurrent memory residence*.

However, Bates teaches *the method of claim 36 wherein the parsed entries in the first pass are excessively large for concurrent memory residence* (col. 23, line 66-col. 24, lines 25; Bates teaches reading data from a file or portion for larger files that surpass the capacity of the DataOCTL.).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Bates for the benefit of a simplified and intuitive means of accessing, presenting, manipulating, and modifying data associated with one or more data source (column 1, lines 25-28).

Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed may 25, 2001) (hereinafter 'Woodmansee') in view of Myhrvold et al. (Patent No.: 5,867,166; Date

of Patent: Feb. 2, 1999) (hereinafter ‘Myhrvold’), Jamshidi et al. (Patent. No.: 6,631,497 B1; Filed: Jul. 19, 1999) (hereinafter ‘Jamshidi’) and further in view of Bates et al. (Patent No.: US 6,901,403 B1; Filing Date: Sep. 14, 2001) (hereinafter ‘Bates’).

In regards to dependent claims 28, Woodmansee, Myhrvold and Jamshidi do not expressly disclose *the data management device of claim 17 wherein parsing further comprises generating parsing events for initiating callback operations, the callback operable on the data set according to predetermined logic.*

However, Bates discloses *generating parsing events for initiating callback operations, the callback operable on the data set according to predetermined logic* (column 11, lines 54-66; Bates teaches a file system interface provide callbacks corresponding to system requests and communicate the requests to the data access manager).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee, Myhrvold and Jamshidi with Bates for the benefit of a simplified and intuitive means of accessing, presenting, manipulating, and modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claims 29, Woodmansee, Myhrvold and Jamshidi do not expressly disclose *the data management device of claim 17 wherein the parsing event correspond to predetermined syntactical structure, and the callback operations are operable for applying the determined output criteria on the entries in the data set.*

However, Bates teaches *the data management device of claim 17 wherein the parsing event correspond to predetermined syntactical structure, and the callback operations are operable for applying the determined output criteria on the entries in the data set* (col. 11, lines 54 - col. 12, line 8; Bates teaches a file system interface provide callbacks corresponding to system requests and communicate the requests to the data access manager. Information in the messages may include an indication of a table in the relational database, and a certain data element (or criteria to determine the data elements) in the table.).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Bates for the benefit of a simplified and intuitive means of accessing, presenting, manipulating, and modifying data associated with one or more data source (column 1, lines 25-28).

6. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed may 25, 2001) (hereinafter 'Woodmansee') in view of Myhrvold et al. (Patent No.: 5,867,166; Date of Patent: Feb. 2, 1999) (hereinafter 'Myhrvold'), further in view of Cuckson et al. (Pub. No.: US 2004/0193646 A1; Filed Mar 31, 2003) (hereinafter 'Cuckson').

In regards to independent claim 31, Woodmansee discloses a method for efficient memory usage for organizing and generating report data indicative of a plurality of manageable entities in a storage area network (SAN) comprising:

*determining, via a user input request, an output criteria applicable to a set of data to compute an ordered output display set adapted for inclusion in a parsing, by a build set handler, in a first pass, a plurality of entries in the set of data (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters (*output criteria*), and processing the extracted data to produce sorted datasets.)*

*filtering according to the filtering criteria, the filtering operable to designate a subset of entries for inclusion in the first pass and the filtering criteria operable on at least one of the fields for comparison and selective inclusion in the designated subset (0003; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. 0014; Woodmansee discloses extracting data from the database system using filters (*filtering criteria*), and processing the extracted data to produce sorted datasets (*subset*). At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset (*subset*), the data would undergo a comparison process to determine the ordering of the data);*

retrieving, during the parsing, a portion of each of the plurality of entries, wherein the parsed entries in the first pass are excessively large for concurrent memory residence (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Using the broadest

interpretation, the Examiner concludes the entries retrieved from the database(s) could have possible been *excessively large for concurrent memory residence.*)

applying, during the first pass, the determined output criteria to the retrieved portion of each parsed entry to compute a subset of candidate entries, the candidate entries computed by determination of a range of entries from the set of data, the range operable for inclusion in a common display screen area (0038; 0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters, and processing the extracted data to produce sorted datasets. Woodmansee discloses the raw data is filtered and displayed on each client computer. Each client computer may further be loaded with applications such as Excel, MINTLAB, PowerPoint and PLADB. Thus, these applications allow the displayable entries to be displayed simultaneously.).

wherein the first pass further comprises filtering entries for omission from the candidate set and comparing key fields in entries for inclusion in the candidate set (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters, and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data.)

the second pass further comprises matching entries for inclusion in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set for display on the output device (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Using the broadest interpretation, the Examiner believes these criterias to include, but not be limited to matching entries for inclusion in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set for display on the output device. Woodmansee further discloses extracting data from the database system using filters (output criteria), and processing the extracted data to produce sorted datasets.)

Woodmansee does not expressly disclose parsing, by a match set handler, in a second pass, the computed subset of candidate entries to identify entries in the data set corresponding to the portions of entries in the candidate entries;

retrieving, by the match set handler, the entire entry corresponding to each of the portion of the entry in the candidate entries;

processing, by a sort handler, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate complete entries of the entries in the candidate set, wherein the parsed entries of the second pass require substantially less memory than the first pass such that the parsed entries of the second pass are stored simultaneously in memory;

formatting, by a format handler, the processed complete entries to generate the output display set of entries, the output display set of entries corresponding to the determined range and ordered according to the ordering logic; and

Myhrvold teaches *parsing, by a match set handler, in a second pass, the computed subset of candidate entries to identify entries in the data set corresponding to the portions of entries in the candidate entries* (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data (*subset of candidate entries*) created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

processing, by a sort handler, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate complete entries of the entries in the candidate set, wherein the parsed entries of the second pass require substantially less memory than the first pass such that the parsed entries of the second pass are stored simultaneously in memory (col. 10, lines 24-28; Myhrvold teaches an architecture which allows data created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass.).

omitting from the memory, during the second pass, entries in the data set outside the output display set of entries (At the time of the invention it would have been obvious to a person of ordinary skill in the art that the data outside the determined criteria would not be included in the acceptable dataset which is to be stored.)

Myhrvold does not expressly disclose *retrieving, by the match set handler, the entire entry corresponding to each of the portion of the entry in the candidate entries* ;

formatting, by a format handler, the processed complete entries to generate the output display set of entries, the output display set of entries corresponding to the determined range and ordered according to the ordering logic;

However, Cuckson teaches *by the match set handler, the entire entry corresponding to each of the portion of the entry in the candidate entries logic* (0020; Cuckson teaches data for the data environment are loaded into records. Each record includes a start field and a end field, which identifies the earliest and latest point in time in which data is applied to the record.).

formatting, by a format handler, the processed complete entries to generate the output display set of entries, the output display set of entries corresponding to the determined range and ordered according to the ordering logic (0019; 0045; Cuckson teaches it may be necessary to map data from one or more data environments into a consistent format. Cuckson further teaches the specific format may depend on the particular software used to operate the system. In a specific embodiment the method to carry out using Oracle database software; however other programs may use Microsoft Access, DB2, and Microsoft Excel.).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Myhrvold with Cucksons for the benefit of efficiently managing systems having very larger volumes of data (0013).

Response to Arguments

In the remarks, Applicant(s) argued in substance that:

A) Woodmansee does not teach, alone or in combination, that the filtering in the first pass designates a subset of entities for inclusion in the output report, the filtering operable on one or more of the fields for selective inclusion.

In reply to argument A, Woodmansee discloses in paragraph [0003] developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee discloses in paragraph [0014] extracting data from the database system using filters (*filtering criteria*), and processing the extracted data to produce sorted datasets (*subset*). At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset (*subset*), the data would undergo a comparison process to determine the ordering of the data.

B) The prior art does not teach the set of data arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns.

In reply to argument B, Jamshidi teaches *the set of data is arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns* (col. 2, lines 16-21; Jamshidi teaches binding data from a data source to one or more cells in a spreadsheet by importing a data object and defining a data source model for a data object).

C) Prior art does not disclose the memory saving operation of the first pass and the second pass.

In reply to argument C, Myhrvold teaches in col. 10, lines 24-28 an architecture which allows data created by the rendering process to be fed back through the texture processor to use as data in the rendering of a new gsprite. Thus teaches the concept of multiple passing rendering a set of data during a first pass, which is rendered data for a second pass. Myhrvold also discloses in col. 21, line 62 – col. 22, line 4 that data can be stored in less specialized memory (with higher access time), which reduces the cost of the overall system. In addition, Myhrvold also discloses in col. 59, lines 11-20 that rendering the gsprite to smaller area in output device coordinates than it actually occupies in the view space, and since the gsprite has a smaller area, it consumes less memory and less processing resources for rendering.

Applicant's arguments filed 11/13/2006 have been fully considered but they are not persuasive. Please see the response to arguments above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The examiner can normally be reached on 8:30 am – 5:30 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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